

20070501.ba v04_n046.bam.20070501

>From ???@??? Mon Apr 30 19:02:12 2007 -0500
Date: Tue, 1 May 2007 00:00:10 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4046
Message-Id: <20070501000012.CD15047009D@srvr1.theporch.com>

BOATANCHORS Digest 4046

Topics covered in this issue include:

- 1) Re: Interesting site:
by <wq9e@speednet.com>
- 2) CD MSD ignitions
by Buzz <muttman@charter.net>
- 3) Sprague T0-4 Capacitor Tester (warning and repair notes)
by "k4pf@juno.com" <k4pf@juno.com>
- 4) Re: Large Collection of Halli Manuals on line
by Al Klase <al@ar88.net>
- 5) Re: Interesting site:
by "Arden Allen" <gumbear@pacbell.net>
- 6) Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
by "Arden Allen" <gumbear@pacbell.net>
- 7) Ranger Manual
by Mike <mike46@shaw.ca>
- 8) Collins 310A3 as 5W qrp rig?
by stuck in 50s <polepeeg@aaa4rm.ba-watch.org>
- 9) Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
by wb3fau@att.net
- 10) Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
by "Don Reaves" <donreaves@gmail.com>
- 11) Anniversary
by Robert Nickels <W9RAN@oneradio.net>
- 12) Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
by "Don Reaves" <donreaves@gmail.com>
- 13) Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
by WA5CAB@cs.com
- 14) 310A3 / qrp (miliwatts vs watts)- Oh Whatta Goo Siam
by stuck in 50s <polepeeg@aaa4rm.ba-watch.org>
- 15) Reforming Caps
by Mike <mike46@shaw.ca>
- 16) Re: Reforming Caps
by "Arden Allen" <gumbear@pacbell.net>
- 17) Re: Reforming Caps - nice side bene
by stuck in 50s <polepeeg@aaa4rm.ba-watch.org>

Content-Disposition: inline
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset="utf-8"
MIME-Version: 1.0
From: <wq9e@speednet.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Interesting site:
Date: Thu, 26 Apr 2007 10:24:46 -0500
Message-Id: <20070426154903.1152D47013D@srvr1.theporch.com>

=0D

Hi Richard,=0D

=0D

thanks for sharing the site. I have one of the Trio sets and it is a prett=
y nice little receiver. It looks like they were inspired =0D
cosmetically by an S-38 but the circuitry/performance is that of a "real" c=
ommunications receiver. It has extremely smooth =0D
tuning and good sensitivity. It was also available through Lafayette under=
their brand name.=0D

=0D

73, Rodger WQ9E=0D

=0D

=0D

On Thu Apr 26 9:56 , n6nae@ix.netcom.com sent:=0D

=0D

>Has this surfaced in the past? Sorry if it's a repeat. Lotsa stuff on Co=
mmand receivers. Does the Trio radio look vaguely =0D
familiar?=0D

>=0D

><http://www.shlrc.mq.edu.au/~robinson/museum/index.html>=0D

>=0D

>Richard=0D

>=0D

>=0D

=0D

=0D

From: Buzz <muttman@charter.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: CD MSD ignitions
Date: Thu, 26 Apr 2007 11:12:01 -0700
Message-ID: <6iq133hur5e86tqts8mqen6o4uc5fk2633@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

I have a Sun ignition scope so a friend brought his newly souped up =
Bronco over
to tweak the smog settings. The car had a multiple discharge system so =
it was
weird to see multiple spikes at every firing.

Buzz

Mime-Version: 1.0
From: "k4pf@juno.com" <k4pf@juno.com>
Date: Thu, 26 Apr 2007 16:12:59 GMT
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Sprague T0-4 Capacitor Tester (warning and repair notes)
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline
Content-Type: text/plain
Message-Id: <20070426.103049.3483.2921664@webmail12.lax.unttd.com>

Hi, Gang

I recently repaired a Sprague T0-4 capacitor tester.
In the process, I found that the Sprague can actually damage
electrolytics under test, depending on their capacitance value.

The problem is that Sprague uses 85 VAC across the bridge elements
on the 0.1 to 50uF "C3" range (power transformer taps 8 to 10)
There is a fixed 2uF capacitor in one leg of the bridge.
So, if you are testing a 1uF capacitor, it will have 2/3
of 85 VAC across it, or about 60 VAC. This is not good,
especially if you are testing an electrolytic capacitor with a low volta=
ge rating. Testing a 40uF capacitor would be OK, it will only have abou=
t 4 VAC across it.

Sprague uses 155 VAC across the bridge (transformer taps 6 to 10) =

for the 45 to 2000 uF "C4" range,
with the same 2 uF capacitor in one leg. A 45 uF capacitor will have
about 7 VAC across it, using this range. Not too bad, but the test shou=
ldn't be prolonged.

The Sprague T0-4 is filled with "Black Beauty" paper capacitors, which s=
hould be replaced automatically, due to their dismal reliability.
Interestingly, the original power supply electrolytics (ca. 1952)
tested fine. For safety's sake, change the power cord to a 3-wire
cord.

If your main potentiometer fails, you may have trouble finding the large Clarostat 7.5K linear wirewound, since that value is no longer manufactured. The pot carries military designation RA30NASD752A. I replaced the pot with a 20K pot, military type RA30NASD203A. (If the last letter is other than an "A", =

the pot is not linear). Resistor R6 (150K) was changed to 400K in order to maintain the calibration of the "C4" range, after the value = of the main pot was changed to 20K.

For future reference, here are the transformer winding voltages, none of which are included in the Sprague T0-4 manual:

term.	6 to 8	70 VAC
	8 to 10	85 VAC
	1 to 3	440 VAC
	1 to 5	665 VAC
	1 to 7	715 VAC
	1 to 9	850 VAC

(Measured with a 125V line voltage input).

73,
Ed Knobloch

Message-ID: <4631033C.1020900@ar88.net>
Date: Thu, 26 Apr 2007 15:53:32 -0400
From: Al Klase <al@ar88.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Large Collection of Halli Manuals on line
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

EXCELLENT!!

I currently have an SX-72L on the bench, and here you are with a clean copy of the manual on line.

Thank you, very much,
Al

John Poulton wrote:

> Recently a friend loaned me a huge collection of original
> Hallicrafters manuals, and I've now finished scanning them
> and putting them up on my website at:
>
> <http://jptronics.org/radios/Hallicrafters/manuals.html>

>
>

--

Al Klase - N3FRQ
Flemington, NJ
<http://www.skywaves.ar88.net/>

Message-ID: <004001c78849\$728e5870\$bfe47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Interesting site:
Date: Thu, 26 Apr 2007 14:07:25 -0700
MIME-Version: 1.0
Content-Type: text/plain;
 charset="UTF-8"
Content-Transfer-Encoding: 7bit

> Does the Trio radio look vaguely familiar?

Sure does. It's the same thing as the Lafayette HE-10, also sold as a kit under another model number of which I forget. I upgraded mine and vastly improved its receptivity. If anyone is interested I have a schematic in electronic form you are welcome to.

Arden Allen
KB6NAX

Message-ID: <004201c78849\$7571f060\$bfe47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
Date: Thu, 26 Apr 2007 14:25:02 -0700
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

>For safety's sake, change the power cord to a 3-wire
cord.

Good advice. While in there replace the two black beauty line bypass caps with 1.5KVDC or 250VAC line bypass rated ceramics. It wasn't until I opened my T0-4 for another purpose that I discovered where the smokey smell had come from the source I hadn't yet found. The line bypass cap on the hot side blew up. Good thing it had a 3 wire cord :-)

Arden Allen
KB6NAX

Date: Thu, 26 Apr 2007 14:34:18 -0700
From: Mike <mike46@shaw.ca>
Subject: Ranger Manual
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <001801c7884a\$a5607cf0\$6801a8c0@m0a1da7d341114>
MIME-version: 1.0
Content-type: text/plain; format=flowed; charset=iso-8859-1; reply-type=original
Content-transfer-encoding: 7bit

Does anyone have a spare construction manual for the Ranger I? (If such an animal even exists) I'm thinking about doing a ground up restoration.

Mike VE7MMH

Date: Thu, 26 Apr 2007 19:00:29 -0400 (EDT)
From: stuck in 50s <polepeeg@aa4rm.ba-watch.org>
Message-Id: <200704262300.13QN0Sbs013058@fracas.netboobie.org>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: stimber@lakemartin.net
Subject: Collins 310A3 as 5W qrp rig?

Has anyone attempted, nay succeeded in this?

Have one running here & the output is miliwatts into a 75 ohm load - not near enuf to drive the 4-125 it was built to excite (in a 30K1).

And durned if all last two 807 plate & grid currents are within mfgr.'s range in manual.

Don't belong to CCA so can't post on their reflector. Durn

Thanks

mighty puzzled Marty

From: wb3fau@att.net
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Arden Allen" <gumbear@pacbell.net>
Subject: Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
Date: Fri, 27 Apr 2007 19:56:56 +0000

Message-Id:

<042720071956.26880.46325588000817D90000690021602806519A0E00CC0D99@att.net>

You gotta give Sprague credit- at least they thought "Black Beautys" were good caps.

Message-ID: <4bc9f60a0704271936y349107bfx66e83c3e2b18367e@mail.gmail.com>

Date: Fri, 27 Apr 2007 21:36:59 -0500

From: "Don Reaves" <donreaves@gmail.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Sprague T0-4 Capacitor Tester (warning and repair notes)

MIME-Version: 1.0

Content-Type: multipart/alternative;

boundary="-----=_Part_255380_20324735.1177727819029"

-----=_Part_255380_20324735.1177727819029

Content-Type: text/plain; charset=ISO-8859-1; format=flowed

Content-Transfer-Encoding: 7bit

Content-Disposition: inline

Does anyone have a T0-3 manual, in pdf format?

I'll trade you a T0-1, 2, 4, 5, 6, or 6A in exchange.

Don W5OR

donreaves@gmail.com

-----=_Part_255380_20324735.1177727819029

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

* ---REMAINDER OF MESSAGE TRUNCATED--- *
* This post contains a forbidden message format *
* (such as an attached file, a v-card, HTML formatting) *
* Mail Lists at theporch.com only accept PLAIN TEXT *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *

-----=_Part_255380_20324735.1177727819029--

Message-ID: <4633C97D.2010309@oneradio.net>

Date: Sat, 28 Apr 2007 17:23:57 -0500

From: Robert Nickels <W9RAN@oneradio.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Anniversary
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

It's a boatanchor anniversary of sorts today, as it was exactly 60 years ago that adventurer Thor Heyerdahl and crew launched their raft "Kon Tiki" on what turned out to be a 101-day, 4,300 mile journey through the Pacific. We know the only means of communications was ham radio - a National NC-173 was used, powered by Burgess batteries, made right here in Freeport, IL. But the transmitter was of "unknown origin" (evidently homebrew) and according to the book, ran 6 watts on 13,990 kc. Wonder if they had special authorization for LI2B to operate outside the ham band or just "went for it"?

73, Bob W9RAN

Message-ID: <4bc9f60a0704281915x2ab6b2eci25c4270949a456a6@mail.gmail.com>
Date: Sat, 28 Apr 2007 21:15:50 -0500
From: "Don Reaves" <donreaves@gmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Hi Ed,
I forgot to click the plain text box with that post. I was asking if anyone had a T0-3 manual, in pdf format, to complete my collection. If you need T0-1,2,4,5,6 or 6A digital format manuals I have them.

Don

On 4/28/07, k4pf@juno.com <k4pf@juno.com> wrote:

>
>
> Hi, Don
>
> Could you send a copy of your Sprague T0-4 msg to me directly?
> All I got from you on the boatanchors reflector
> is the note about "Remainder of message truncated" due to use of html.
>
> Thanks and 73,
> Ed
>
>

From: WA5CAB@cs.com
Message-ID: <c18.114457b8.33655d3e@cs.com>
Date: Sat, 28 Apr 2007 22:30:22 EDT
Subject: Re: Sprague T0-4 Capacitor Tester (warning and repair notes)
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_c18.114457b8.33655d3e_boundary"

--part1_c18.114457b8.33655d3e_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Ed,

I received the whole post (along with the BS message at the bottom). If you only received the truncated post, your mail manager is improperly set up ('course now that I think about it, you won't receive this either, 'cause your mail manager is improperly set up.).

In a message dated 4/28/2007 8:16:37 PM Central Standard Time, donreaves@gmail.com writes:

> Hi Ed,
> I forgot to click the plain text box with that post. I was asking if
> anyone had a T0-3 manual, in pdf format, to complete my collection.
> If you need T0-1,2,4,5,6 or 6A digital format manuals I have them.
>
> Don
>
>
> On 4/28/07, k4pf@juno.com <k4pf@juno.com> wrote:
> >
> >
> >Hi, Don
> >
> >Could you send a copy of your Sprague T0-4 msg to me directly?
> >All I got from you on the boatanchors reflector
> >is the note about "Remainder of message truncated" due to use of html.
> >
> >Thanks and 73,
> >Ed

Robert Downs - Houston
<<http://www.wa5cab.com>> (Web Store)

MVPA 9480

<wa5cab@cs.com> (Primary email)

<wa5cab@houston.rr.com> (Backup email)

--part1_c18.114457b8.33655d3e_boundary

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

```
* * * * *
*      ---REMAINDER OF MESSAGE TRUNCATED---      *
*      This post contains a forbidden message format      *
*      (such as an attached file, a v-card, HTML formatting) *
*      Mail Lists at theporch.com only accept PLAIN TEXT      *
*      If your postings display this message your mail program *
*      is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *
```

--part1_c18.114457b8.33655d3e_boundary--

Date: Sun, 29 Apr 2007 09:11:22 -0400 (EDT)

From: stuck in 50s <polepeeg@aa4rm.ba-watch.org>

Message-Id: <200704291311.13TDBMAc021252@fracas.netboobie.org>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: 310A3 / qrp (miliwatts vs watts)- Oh Whatta Goo Siam

Remember the plea about low output on the 30K1 exciter? Here was the resolution.

I had a HB 50 ohm 6W "qrp load" across which I was measuring voltage with an old B&K dvm & RF probe. Was getting ~5V rather than the wanted 15V or so. ($P=E \times E/R$)

Noticed the paralleled triplicate of 2W 150ohm resistors were warming nicely which was muy puzzling.

So I puts a Bird* cum 25-60mhz 25W slug in the line on 10m. Dead nuts 5W out

Something's wrong with the RF probe & nuttin' with the septagenarian 310A3... a giz that probably hasn't seen juice for a half-century.

They sure cud build 'em in Cheddar Rapids.

Oh & hey thanks for the many suggestions!!

signed

proud owner of a jurassic qrp moxone

*who remembers the Kiwi Airlines theme song?

Date: Sun, 29 Apr 2007 06:42:20 -0700

From: Mike <mike46@shaw.ca>

Subject: Reforming Caps

To: Old Tube Radios <boatanchors@theporch.com>

Message-id: <000601c78a64\$35f0ba80\$6801a8c0@m0a1da7d341114>

MIME-version: 1.0

Content-type: text/plain; format=flowed; charset=iso-8859-1; reply-type=original

Content-transfer-encoding: 7bit

When reforming some caps I've noticed that as the supply voltage reaches about 3/4 of the rated voltage occasional small abrupt fluctuations in current (In the order of .01 ma) happen. This is with a steady voltage, no voltage change in the supply or across the cap is observable on a meter. Does anyone know what's happening and if this is indicative of a problem cap?

Mike VE7MMH

Message-ID: <001f01c78a94\$745a8230\$0fe47443@KB6NAX>

From: "Arden Allen" <gumbear@pacbell.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Reforming Caps

Date: Sun, 29 Apr 2007 12:25:05 -0700

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

>Does anyone know what's happening and if this is indicative of a
problem
> cap?

I have observed this more times than I like when trying to make use of oldish 'lytics. My guess is it is due to tiny arcs occurring which are damaging to the foil separator. If over a relatively short time the current jumping stops you are probably alright. If it continues more than a half hour or so it doesn't look good for the cap. The key is for the leakage to decrease over a few hours to a day or so to new cap level. If leakage does not go down it won't be safe to use in a circuit where a rectifier tube and power transformer could be wrecked. I usually replace electrolytics that don't reform nicely in about an hour.

Arden Allen
KB6NAX

Date: Mon, 30 Apr 2007 10:57:24 -0400 (EDT)
From: stuck in 50s <polepeeg@aa4rm.ba-watch.org>
Message-Id: <200704301457.13UEv0SC025241@fracas.netboobie.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Reforming Caps - nice side bene

One guy mentioned this. If you enroll electrolytics at the in-situ reform school, do see if there's bleeders & lift em off ground

bleeders as in hf command rx

Then do the deed.

On the reform road you can check for RC coupler leakage & screen bypass shennanigans.

After luck allows things to come to operating range w/o leakage, then apply current-limited juice to avc line & check for V-drop across hi-R isolating resistors.

Sometimes a 5-tube table radio (aa5) can be safely/surely returned to talk-radio in under a half hour

Procedure can save hours of good-practice unilateral replacement of all brown waxies. An which, in case of Industrial Capacitor Co, are usually all fine.

Marty

End of BOATANCHORS Digest 4046
